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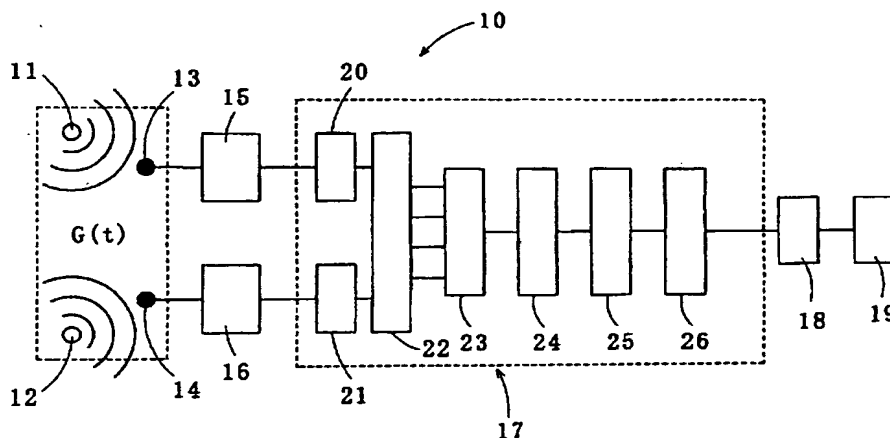
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(54) Title: A METHOD FOR RECOVERING TARGET SPEECH BASED ON SPEECH SEGMENT DETECTION UNDER A STATIONARY NOISE



(57) Abstract: Method for recovering target speech by extracting signal components falling in a speech segment, which is determined based on separated signals obtained through the Independent Component Analysis, thereby minimizing the residual noise in the recovered target speech. The present method comprises: the first step of receiving target speech emitted from a sound source and a noise emitted from another sound source and extracting estimated spectra  $Y^*$  corresponding to the target speech by use of the Independent Component Analysis; the second step of separating from the estimated spectra  $Y^*$  an estimated spectrum series group  $y^*$  in which the noise is removed by applying separation judgment criteria based on the kurtosis of the amplitude distribution of each of estimated spectrum series in  $Y^*$ ; the third step of detecting a speech segment and a noise segment of the total sum  $F$  of all the estimated spectrum series in  $y^*$  by applying detection judgment criteria based on a predetermined threshold value  $T$  that is determined by the maximum value of  $F$ ; and the fourth step of extracting components falling in the speech segment from the estimated spectra  $Y^*$  to generate a recovered spectrum group of the target speech for recovering the target speech.



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